

REMARKS

At the outset, the Examiner is thanked for the thorough review and consideration of the subject application.

The Office Action of March 12, 2002, has been received and contents carefully reviewed. Claims 1-26 are pending in the present application. The specification has been amended to correct a typographical error. Applicant submits no new matter has been added.

The Examiner objected to the specification as containing informalities, Applicant has amended the specification to obviate the objection. Accordingly, Applicant requests withdrawal of the objection to the specification.

The Examiner rejected claims 13-14, 19-21, and 26 under 35 U.S.C. § 102(e) as being anticipated by Koizumi et al. (U.S. Pat. No. 6,177,917); claims 18 and 25 under 35 U.S.C. § 103(a) as being unpatentable over Koizumi et al.; claims 15-17 and 22-24 under 35 U.S.C. § 103(a) over Koizumi et al. in view of Jahagirdar et al. (U.S. Pat. No. 6,125,286); and claims 1-12 under 35 U.S.C. § 103(a) over Jahagirdar et al. in view of Koizumi et al. and Higginbotham et al. (U.S. Pat. No. 5,896,575). Applicant respectfully traverses these rejections and requests reexamination and reconsideration.

Koizumi et al. discloses a method for driving a liquid crystal display device including a liquid crystal panel which has a pair of substrates facing each other with a liquid crystal layer interposed there between and respectively having signal electrodes and scanning electrodes which are located perpendicular to each other. See Abs.

In addition, in Figure 4 Koizumi et al. discloses an operation circuit 32 connected to a first signal electrode driving circuit 13 and second signal electrode driving circuit 15. Where the "operation circuit 32 performs orthogonal transformation of display data stored in the member 31 based on an orthogonal matrix produced by a function generating circuit 33.

Then, the resultant display data is applied to first and second signal electrode driving circuits 13 and 15.” See col. 10, lines 36-41.

In contrast, Koizumi et al. discloses “a first scanning electrode driving circuit 21 receives a control signal and an orthogonal matrix which is generated by the function generating circuit 33, and also receives a voltage waveform for driving a scanning electrode from the driving voltage generating circuit 14.” See col. 10, lines 53-57.

In addition, Koizumi et al. discloses a second scanning electrode driving circuit 22 that “receives a control signal and an orthogonal matrix which is generated by the function generating circuit 33, and also receives a voltages waveform for driving a scanning electrode from the driving voltage generating circuit 14. See col. 11, lines 7-11.

However, none of the cited references, singly, or in combination, teaches or suggests, a combination of elements including, for example, “an operator for operating the first and second liquid crystal displays having a plurality of scan electrode lines connected to the first and second scan electrodes, and a plurality of signal electrode lines connected to the first signal electrodes and the second signal electrodes, respectively” as recited in independent claim 13 and similarly independent claim 20. Accordingly, Applicant respectfully submits that independent claims 13 and 20, and claims 14-19 and 21-26, which depend from claims 13 and 20, respectively, are allowable over the cited reference.

The Examiner rejected claims 18 and 25 under 35 U.S.C. § 103(a) as being unpatentable over Koizumi et al. Applicant respectfully traverses these rejections and reconsideration is hereby requested.

Dependent claim 18 depends from independent claim 13 and therefore, incorporates all the limitations of claim 13. However, as explained supra, Koizumi et al. does not teach or suggest a combination of elements including, “an operator for operating the first and second liquid crystal displays having a plurality of scan electrode lines connected to the first and

second scan electrodes, and a plurality of signal electrode lines connected to the first signal electrodes and the second signal electrodes, respectively.” Accordingly, for at least the foregoing reasons, dependent claim 18, which depends from independent claim 13 is allowable over the cited reference.

Dependent claim 25 depends from independent claim 20 and therefore, incorporates all the limitations of claim 25. Accordingly, Applicant respectfully submits that for at the foregoing reasons, dependent claim 25, which depends from independent claim 20 is allowable over the cited reference.

The Examiner rejected claims 15-17 and 22-24 under 35 U.S.C. § 103(a) as being unpatentable over Koizumi et al. in view of Jahagirdar et al.

For similar reasons as discussed above, Koizumi et al. does not teach or suggest at least the foregoing combination of elements. In addition, Jahagirdar et al. fails to cure the deficiencies of Koizumi et al.

Jahagirdar et al. discloses a portable communication device 102 includes a housing 105, a first display area 130 and a second display area 132. See Abs. In addition, in FIG. 5 a driver 1 and driver 2 for controlling display 1 and display 2, respectively. Specifically, disclosing a “controller 504 selects one of the drivers 514 and 518 to receive display data through a line 526 (for driver 514) and a line 532 (for driver 518), and sends the display data via a data bus 528 coupled to both of drivers 514 and 518. See col. 4, lines 34-39.

However, Jahagirdar et al. does not teach or suggest a combination of elements including, for example, “an operator for operating the first and second liquid crystal displays having a plurality of scan electrodes lines connected to the first and second scan electrodes,” as recited in independent claim 13. Accordingly, Applicant respectfully submits that dependent claims 15-17 and 22-24, which depend from independent claims 13 and 20,

respectively, are allowable over the cited references for at least the foregoing reasons, as well as the additional features from dependent claims 15-17 and 22-24.

Finally, the Examiner rejected claims 1-12 under Jahagirdar et al. in view of Koizumi et al. and Higginbotham et al. Applicant respectfully traverses these rejections and reconsideration is hereby requested.

Claim 1 is allowable over the cited references in that independent claim 1 recites a combination of elements including, for example, “an operator for operating the first and second display means having ‘m’ scan electrode lines connecting the ‘k’ scan electrodes in the first display means and the ‘m-k’ scan electrodes in the second display means, and ‘n’ signal electrode lines connected to the first signal electrodes and the second signal electrodes, respectively.” None of the cited references, singly or in combination, teaches or suggests at least this feature of the claimed invention.

Koizumi et al. discloses a method for driving a liquid crystal display device including a liquid crystal panel which has a pair of substrates facing each other with a liquid crystal layer interposed there between and respectively having signal electrodes and scanning electrodes which are located perpendicular to each other. See Abs. In Figure 4 disclosing an operation 32 for connected to a first signal electrode driving circuit 13 and second signal electrode driving circuit 15. In addition, disclosing the “operation circuit 32 performs orthogonal transformation of display data stored in the member 31 based on an orthogonal matrix produced by a function generating circuit 33. Then, the resultant display data is applied to first and second signal electrode driving circuits 13 and 15.” See col. 10, lines 36-41.

Koizumi et al. discloses that “a first scanning electrode driving circuit 21 receives a control signal and an orthogonal matrix which is generated by the function generating circuit

33, and also receives a voltage waveform for driving a scanning electrode from the driving voltage generating circuit 14.” See col. 10, lines 53-57.

Further, Koizumi et al. discloses a second scanning electrode driving circuit 22 which “receives a control signal and an orthogonal matrix which is generated by the function generating circuit 33, and also receives a voltages waveform for driving a scanning electrode from the driving voltage generating circuit 14.” See col. 11, lines 7-11.

Higginbotham et al. discloses an electronic device 100 including a processor 808 for processing a message 110, and a display 114 electrically coupled to the processor for displaying an image including a message. See Abs.

However, Higginbotham et al. does not cure the deficiencies of Koizumi et al. or Jahagirdar et al. None of the cited references, singly or in combination, teaches or suggests all of the features of the claimed invention as recited in independent claims 1 and 7. Accordingly, Applicant respectfully submits that independent claims 1 and 7, and dependent claims 2-6 and 8-12, which depend from independent claims 1 and 7, respectively, are allowable over the cited references.

Therefore, Applicant respectfully requests the withdrawal of the rejection of claims 13-14, 19-21 and 26 under 35 U.S.C. § 102 over Koizumi et al.; claims 18 and 25 under 35 U.S.C. § 103 over Koizumi et al.; claims 15-17 and 22-24 under 35 U.S.C. § 103 over Koizumi et al. with Jahagirdar et al.; and claims 1-12 under 35 U.S.C. § 103 over Jahagirdar et al. in combination with Koizumi et al. and Higginbotham et al.

Applicants believe the foregoing amendments place the application in condition for allowance and early, favorable action is respectfully solicited. Should the Examiner deem that a telephone conference would further the prosecution of this application; the Examiner is invited to call the undersigned attorney at (202) 496-7500.

All correspondence should continue to be sent to the below-listed address.


If these papers are not considered timely filed by the Patent and Trademark Office, then a petition is hereby made under 37 C.F.R. § 1.136, and any additional fees required under 37 C.F.R. § 1.136 for any necessary extension of time, or any other fees required to complete the filing of this response, may be charged to Deposit Account No. 50-0911. Please credit any overpayment to deposit Account No. 50-0911.

In view of the above, each of the presently pending claims in this application is believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to withdraw the outstanding rejection of the claims and to pass this application to issue.

Dated: 6-5-02

Respectfully submitted,

MCKENNA LONG & ALDRIDGE LLP
1900 K Street, N.W.
Washington, D.C. 20006
Tel: (202) 496-7500

By 
Song K. Jung
Registration No.: 35,210

William D. Titcomb
Registration No. 46,463

MARKED UP VERSION OF AMENDED SPECIFICATION**Specification Page 13, First Paragraph: Version to Show Changes Made**

operation of the first and second LCDs 200 and 300 respectively mounted on inside/outside surfaces of the folder cover [400] 410 in response to a control signal provided from the controller 70 for displaying characters, numerals, or graphics of figures. The frame memory 110 processes a signal provided for controlling display in frame units for maintaining a stable display of the characters, numerals, or figures.